AIR QUALITY PERMIT

Issued To: Williston Basin Interstate Pipeline Company Permit: #3301-01

Baker Booster and Sandstone Creek Administrative Amendment (AA)
Compressor Stations Request Received: 3/22/07

P.O. Box 131 Department's Decision on AA: 5/21/07

Glendive, MT 59330 Permit Final: 6/06/07 AFS: #025-0013

An air quality permit, with conditions, is hereby granted to the Williston Basin Interstate Pipeline Company – Baker Booster and Sandstone Creek Compressor Stations (WBI), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seg.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

WBI owns and operates the Baker Booster and Sandstone Creek Compressor Stations. The facility is a natural gas booster and transmission compressor station. The WBI station is located approximately 1.5 miles north of Baker, Montana, in the NE¼ of Section 2, Township 7 North, Range 59 East, in Fallon County, Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On March 22, 2007, the Montana Department of Environmental Quality (Department) received a request from WBI for an administrative amendment to Permit #3301-00. Specifically, under permit #3301-00, WBI permitted five 1680-horsepower (hp) capacity Waukesha compressor engines for the purpose of providing natural gas gathering services at the Baker Booster Compressor Station. Under the current permit action, WBI proposes to maintain the five previously permitted engines; however, WBI will dedicate two of these engines for the purpose of natural gas transmission services. The two engines used for transmission services will be installed within the Baker Booster Tract but adjacent to the existing Baker Booster Compressor Station. The new adjacent station will be named the Sandstone Creek Compressor Station and the affected engines will be named Sandstone Creek Unit #1 and Sandstone Creek Unit #2. The overall permitted facility will be named the WBI Baker Booster and Sandstone Creek Compressor Stations. All limits and conditions applicable to the affected Waukesha engines remain the same.

SECTION II. Conditions and Limitations

A. Emission Limitations

1. Emissions, from each of the five 1,680-hp Waukesha compressor engines at the Baker Booster and Sandstone Creek Compressor Stations, shall be controlled by a non-selective catalytic reduction (NSCR) unit and an air to fuel ratio (AFR) controller. Emissions from each of the engines shall not exceed the following limits:

| NO_x^{-1} | 3.70 lb/hr (ARM 17.8.752) |
|-------------|---|
| CO | 4.44 lb/hr (ARM 17.8.749 and ARM 17.8.1204) |
| | |

VOC 1.85 lb/hr (ARM 17.8.752)

1 NO_x reported as NO₂

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- 2. WBI shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).
- 3. WBI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 4. WBI shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).

B. Testing Requirements

- Each of the five 1,680-Hp Waukesha compressor engines shall be initially tested for NO_x and CO, concurrently, to demonstrate compliance with the emission limits in Section II.A.1. The testing shall be conducted within 180 days of the initial start up date of the respective compressor engine. Further testing shall continue on an every-4-year basis, or according to another testing/monitoring schedule as may be approved by the Department of Environmental Quality (Department) (ARM 17.8.105 and ARM 17.8.749).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. WBI shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. WBI shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

- 3. All records compiled in accordance with this permit must be maintained by WBI as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 4. WBI shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

D. Notification

WBI shall provide the Department (both the Billings regional office and the Helena office) with written notification of the following information within the specified time periods (ARM 17.8.749).

- WBI shall provide the Department with written notification of commencement of construction of the Sandstone Creek Compressor Station within 30 days after commencement of construction.
- 2. WBI shall provide the Department with the actual start-up date of each of the five 1,680-Hp Waukesha compressor engines within 15 days after the actual start-up date of each respective engine.

SECTION III: General Conditions

- A. Inspection WBI shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and the terms, conditions, and matters stated herein shall be deemed accepted if WBI fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving WBI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this

section. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board.

- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by WBI may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Permit Analysis Williston Basin Interstate Pipeline Company Baker Booster and Sandstone Creek Compressor Stations Permit #3301-01

I. Introduction/Process Description

Williston Basin Interstate Pipeline Company owns and operates the Baker Booster and Sandstone Creek Compressor Stations (WBI). The facility is a natural gas booster and transmission compressor station(s) located approximately 1.5 miles north of Baker, Montana, in the NE¼ of Section 2, Township 7 North, Range 59 East, in Big Horn County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- Five 1,680-horsepower (hp) Waukesha 7044 GSI compressor engines. Three of the five engines have been installed and operate at the Baker Booster Compressor Station for the purpose of natural gas gathering and two of the engines will be installed and operate at the adjacent Sandstone Creek Compressor Station for the purpose of natural gas transmission.
- One Glycol dehydration unit with a heat input capacity of 0.75 million British thermal units (MMBtu) per hour.
- Miscellaneous support equipment and materials including, but not limited to, tank heaters.

B. Source Description

The WBI facility is a natural gas booster and transmission compressor station. Production field facilities withdraw the natural gas from the surrounding production field and send the natural gas to the WBI station to be dehydrated and compressed for transmission through long-haul pipelines for transport to natural gas markets. The glycol dehydration unit is used to remove moisture from the gas and the five compressor engines are used to boost pipeline pressure for transmitting the natural gas through the pipeline. The WBI station is not a production field facility; rather, the station dehydrates and compresses natural gas that is received from surrounding production field facilities.

C. Permit History

On April 27, 2004, WBI was issued Permit #3301-00 for the installation and operation of five 1,680-hp Waukesha 7044 GSI compressor engines, a glycol dehydration unit with a heat input capacity of 0.75 million British thermal units (MMBtu) per hour, and miscellaneous support equipment. The permitted facility was constructed and operated for the purpose of natural gas gathering activities under Standard Industrial Classification (SIC) Code 1311 and North American Industry Classification System (NAICS) Code 211111.

D. Current Permit Action

On March 22, 2007, the Montana Department of Environmental Quality (Department) received a request from WBI for an administrative amendment to Permit #3301-00. Specifically, under permit #3301-00, WBI permitted five 1680-hp capacity Waukesha compressor engines for the purpose of providing natural gas gathering services at the Baker Booster Compressor Station. Under the current permit action, WBI proposes to maintain the five previously permitted

engines; however, WBI will dedicate two of these engines for the purpose of natural gas transmission services under SIC code 4922 and NAICS Code 486210. The two engines used for transmission services will be installed within the Baker Booster Tract but adjacent to the existing Baker Booster Compressor Station. The new adjacent station will be named the Sandstone Creek Compressor Station and the affected engines will be named Sandstone Creek Unit #1 and Sandstone Creek Unit #2. The overall permitted facility will be named the WBI Baker Booster and Sandstone Creek Compressor Stations. All limits and conditions established under permit #3301-00 and applicable to the affected Waukesha engines remain the same. Permit #3301-01 replaces permit #3301-00.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

WBI shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly, by telephone, whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

WBI must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne.</u> (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, WBI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 - 5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. WBI will burn natural gas in its fuel burning equipment, which will meet this limitation.
 - 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

- 7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.
- 8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. A major Hazardous Air Pollutant (HAP) source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as applicable, including the following subparts:
 - Subpart HH National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.
 - Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities
 - Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.

The WBI Facility is not subject to the provisions of 40 CFR Part 63, because the facility is not a major source of HAPs.

- D. ARM 17.8, Subchapter 4 Stack Height and Dispersion Techniques, including, but not limited to:
 - 1. <u>ARM 17.8.401 Definitions</u>. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.402 Requirements</u>. WBI must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed heights of the all stacks for the WBI Symons Central Compressor Station are below the allowable 65-meter GEP stack height.
- E. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. The current permit action is an administrative amendment and does not require a permit application or an application fee.
 - 2. ARM 17.8.505 When Permit Required--Exclusions. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

- F. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. WBI has the potential to emit more than 25 tons per year of oxides of nitrogen (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits -- Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. WBI submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. The current permit action is an administrative amendment and does not require public notice.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 - 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The current permit action does not propose the addition or modification of any equipment or result in any change in permitted emissions at the WBI facility; therefore, a BACT analysis and determination is not required.
 - 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 - 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving WBI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
 - 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- G. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

- H. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

- 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program.</u> (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3301-01 for WBI, the following conclusions were made.
 - a. The facility's permitted PTE is less than 100 tons/year for all pollutants.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS.
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.
 - h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit the source's PTE. WBI's Permit #3301-00 includes federally enforceable limits that allow the facility to stay below the Title V Operating Permit threshold. Therefore, the facility is not required to obtain a Title V Operating Permit.
 - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. WBI shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

Based on these facts, the Department determined that WBI will be a synthetic minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or altered source. WBI shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The current permit action does not result in the addition of any new or modified equipment or any change in permitted emissions at the WBI facility; therefore, a BACT analysis and determination is not required.

IV. Emission Inventory

| Ton/year | | | | | | | |
|---|-----------|-----------------|-------|-------|--------|--|--|
| Source | PM_{10} | NO _x | VOC | CO | SO_x | | |
| 1,680-Hp Waukesha Compressor Engine - Unit #1 | 0.55 | 16.22 | 8.11 | 19.47 | 0.03 | | |
| 1,680-Hp Waukesha Compressor Engine - Unit #2 | 0.55 | 16.22 | 8.11 | 19.47 | 0.03 | | |
| 1,680-Hp Waukesha Compressor Engine - Unit #3 | 0.55 | 16.22 | 8.11 | 19.47 | 0.03 | | |
| 1,680-Hp Waukesha Compressor Engine - Unit #4 | 0.55 | 16.22 | 8.11 | 19.47 | 0.03 | | |
| 1,680-Hp Waukesha Compressor Engine - Unit #5 | 0.55 | 16.22 | 8.11 | 19.47 | 0.03 | | |
| Glycol Dehy Reboiler (0.75 MMBtu/hr) | 0.02 | 0.33 | 0.02 | 0.28 | 0.002 | | |
| Dehy Still Vent | 0.00 | 0.00 | 13.44 | 0.00 | 0.00 | | |
| Heater | 0.07 | 0.97 | 0.05 | 0.81 | 0.01 | | |
| Total | 2.85 | 82.41 | 40.63 | 98.42 | 0.18 | | |

1,680-Hp Compressor Engines (5 Engines)

Brake Horsepower: 1680 bhp Hours of operation: 8760 hr/yr

PM₁₀ Emissions

Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)

Fuel Consumption: 13.23 MMBtu/hr (Maximum Design) Calculations: 13.23 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.14 lb/hr 0.14 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.55 ton/yr

NO_x Emissions

Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 3.70 lb/hr

3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.22 ton/yr

VOC Emissions

Emission factor: 0.5 gram/bhp-hour (BACT Determination)

Calculations: 0.5 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 1.85 lb/hr

1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.10 ton/yr/engine

CO Emissions

Emission factor: 1.2 gram/bhp-hour (Permit Limit)

Calculations: 1.2 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 4.44 lb/hr

4.44 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 19.47 ton/yr/engine

SO₂ Emission

Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)

 $\label{eq:consumption: 13.23 MMBtu/hr} Fuel Consumption: 13.23 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.01 lb/hr \\ Calculations: 13.23 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.01 lb/hr \\ \end{tabular}$

 $0.01\ lb/hr*8760\ hr/hr*0.0005\ ton/lb=0.03\ ton/yr$

Glycol Dehy Reboiler

Heat Output: 0.75 MMBtu/hr (Maximum Design)

Hours of Operation: 8760 hr/yr

Fuel Heating Value: 0.001 MMScf/MMBtu

Fuel Consumption: 0.75 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 6.57 MMScf/yr

PM₁₀ Emissions

Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 7.6 lb/MMScf * 6.57 MMScf/yr * 0.0005 ton/lb = 0.025 ton/yr

NO_x Emissions

Emission factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 100 lb/MMScf * 6.57 MMScf/yr * 0.0005 ton/lb = 0.329 ton/yr

VOC Emissions

Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 5.5 lb/MMScf * 6.57 MMScf/yr * 0.0005 ton/lb = 0.018 ton/yr CO Emissions

Emission factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 84 lb/MMScf * 6.57 MMScf/yr * 0.0005 ton/lb = 0.276 ton/yr

SO₂ Emission

Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 0.6 lb/MMScf * 6.57 MMScf/yr * 0.0005 ton/lb = 0.002 ton/yr

Dehydrator Still Vent

Hours of Operation: 8760 hr/yr

VOC Emissions

Emission Factor: 3.069 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 3.069 lb/hr * 8760 hr/yr *0.0005 ton/lb = 13.44 ton/yr

HAPs Emissions

Emission Factor (Total): 2.475 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 2.475 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 10.84 ton/yr

Specific HAPs (BTEX Emissions)

Benzene: 0.286 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 0.286 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.25 ton/yr

Toluene: 0.707 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 0.707 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.10 ton/yr

Ethylbenzene: 0.136 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 0.136 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.60 ton/yr

Xylenes: 1.346 lb/hr (GRI-GLYCalc, Version 4.0, Emission Estimate Source Specific)

Calculations: 1.346 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 5.90 ton/yr

Heater

Heat Output: 2.21 MMBtu/hr (Maximum Design)

Hours of Operation: 8760 hr/yr

Fuel Heating Value: 0.001 MMScf/MMBtu

Fuel Consumption: 2.21 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 19.36 MMScf/yr

PM₁₀ Emissions

Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 7.6 lb/MMScf * 19.36 MMScf/yr * 0.0005 ton/lb = 0.074 ton/yr

NO_x Emissions

Emission factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 100 lb/MMScf * 19.36 MMScf/yr * 0.0005 ton/lb = 0.968 ton/yr

VOC Emissions

Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 5.5 lb/MMScf * 19.36 MMScf/yr * 0.0005 ton/lb = 0.053 ton/yr

CO Emissions

Emission factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 84 lb/MMScf * 19.36 MMScf/yr * 0.0005 ton/lb = 0.813 ton/yr

SO₂ Emission

Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 0.6 lb/MMScf * 19.36 MMScf/yr * 0.0005 ton/lb = 0.006 ton/yr

V. Existing Air Quality

The WBI station is located approximately 1.5 miles north of Baker, Montana, in the NE¼ of Section 2, Township 7 North, Range 59 East, in Fallon County, Montana. Fallon County is considered unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. In the view of the Department, controlled emissions from the proposed WBI station will not cause or contribute to a violation of any NAAQS.

VI. Ambient Air Impact Analysis

The current permit action does not propose the addition or modification of any equipment or result in any change in permitted emissions at the WBI facility; therefore, the current permit action will not result in additional air quality impacts to the area.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII.Environmental Assessment

The current permit action is an administrative amendment and does not constitute a state action; therefore, an environmental assessment is not required under the provisions of the Montana Environmental Policy Act.

Permit Analysis Prepared By: M. Eric Merchant, MPH

Date: May 8, 2007